Abstract of the Disclosure

A tandem track system and method provides for safe withdrawal of a tracked vehicle if either of the main tracks becomes separated. The tracked vehicle has a main track longitudinally extending in a closed endless main loop on opposite sides and engaging a separate main drive sprocket assembly, extending under roadwheels to a main drive idler wheel, and back to the main drive-sprocket assembly in the main loop. The tandem drive system has a secondary track engaging each main drive-sprocket assembly and extending forward along the track vehicle from each main drive-sprocket assembly under only an aft-most fractional portion of the roadwheels. The secondary track is configured as a closed endless secondary loop inside of the main loop of each main track whereby each secondary track can transfer rotary power to move the tracked vehicle to safety.